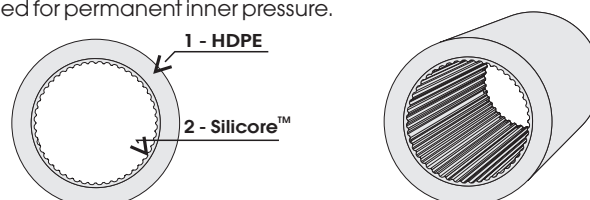


## Microduct DuraMicro DB 14/10 mm

Microduct DuraMicro DB is intended for protection of optical microcables. Structural part (1) is made from high density polyethylene (HDPE). Inner surface (2) is made from permanent sliding material Sillicore™ with a very low coefficient of friction and standardly with fine ribs. Outer microduct's surface is smooth. Microduct is not designed for permanent inner pressure.



Wall thickness and material classify the microduct as a Direct Burial (DB). Installation methods and conditions are described in the Installation manual. The microduct can be supplied also as a part of bundles DuraFlat™ and DuraMulti.

- DURA-LINE CT's quality system is certified according to EN ISO 9001, EN ISO 14001 and OHSAS 18001.
- The microduct does not contain chemicals in accordance to the Directive of the European Parliament and the Commission no. 2006/1907/EC (REACH)
- The microduct meets requirements of the Directive of the European Parliament and the Commission no. 2011/65/EU (RoHS), as amended on January 3, 2013 (RoHS II).

The details to parameters are in company standard CWS 103-2015.

### DESCRIPTION, APPLICATION

### LEGISLATION

### PARAMETERS

Parameter	Value	Standard, conditions
Outer diameter (OD)	14±0,1 mm	CWS 103-2015
Inner diameter (ID)	min. 9,9 mm	CWS 103-2015
Wall thickness (WT)	min. 1,9 mm	CWS 103-2015
Ovality	max. 5%	CWS 103-2015, before coiling
Blown ball test (BB test)	pass	CWS 103-2015, ball diameter 8,0 mm
Inner coefficient of friction	max. 0,1	CWS 103-2015
Burst pressure	min. 50 bar	ČSN EN ISO 1167-1, 2
Visual examination	free from defects	CWS 103-2015
Kink	diameter ≥ 15 x OD	IEC 60 794-1-2, method E10
Crush - residual deformation	max. 15% OD = max. 2,1 mm	CSN EN 60794-1-2. ed. 4, E3, sample 200mm, active 100mm, force 1 400 N, 3 mm/min., action 60 s, recovery 20 s
Crush - pressure force	min. 1 000 N	CSN EN 60794-1-2. ed. 4, E3, sample 200mm, active 100mm, ID deformation by 15%, speed 3 mm/min.
Environmental Stress Crack Residence of HDPE resin used (ESCR)	min. 1 000 hours	ASTM D 1693, method B
Impact	no damage after the test, dimens. in tolerances after recovery	ČSN EN 60794-1-2. ed. 4, method E4, striking surface radius 10 mm, impact energy 15 J, recovery time 1 h
Bending stiffness	min. 0,61 N.m <sup>2</sup>	CWS 103-2015
Thermal expansion	*1,6.10 <sup>-4</sup> K <sup>-1</sup>	ISO 11359-2, temperature range from -20°C to +70°C
Longitudinal reversion	max. 3%	CSN EN ISO 2505, oven, 110°C, 60 min.
Standard Dimension Ratio (SDR = OD/WT)	*7	-
Weight	*72 kg/km	-
Transport and storage temperatures	from -40°C to +70°C	-
Installation temperatures	from -20°C to +50°C	-
Operating temperatures	from -40°C to +70°C	-
Installation tensile force	max. 1 010 N	-
Recommended cable dimens. for blowing	from 3,0 to 7,0 mm	-
Minimum bending radius	140 mm	-
Blowing pressure	max. 20 bar	max. 2 hours at max. +50°C
Chemical resistance	compliant with the standard	EN 61 386-24
Outdoor exposure limit	max. 12 months	Central Europe conditions

\* informative value

## Microduct DuraMicro DB 14/10 mm

### MODIFICATION

- **Standard** is a basic material version convenient for most applications.
- **UV stabilized** is more resistant to ultraviolet radiation. Storability is prolonged to 24 months at Central Europe outdoor conditions.
- **Antistatic** - lower electrical surface resistance.
- **Antirodent** is more resistant to rodents because of special repellent additives.
- **Preinstalled pulling cord** with tensile strength min. 300 N.

### COLOR LIST

Microduct is supplied in natural translucent version or in wide scale of following RAL list. Longitudinal stripes with the same color are another possibility.



### MARKING

Microduct is printed in whole length according to customer requirement. Printing color is contrasting to microduct color. Printing can be doubled in opposite sides as an option. Printing scheme is repeating after 1 metre.

#### Example of printing scheme:

DURA-LINE CT DuraMicro DB 14/10 mm SILICORE 11/2018 LOT No 12345678 0000m ><

### PACKING AND STORAGE

Microduct is wound on disposable drum (MTB) and coil is wrapped by stretch film. Microduct's ends are protected by plastic caps protecting them from impurities penetrating into microduct. End of microduct is minimally 10 mm under the flange edge. MTB flanges are regularly made from chipboard and have to be protected from moisture.

Option - MTB flanges can be made from Oriented Strand Board (OSB) which is waterproof.

MTB core diameter is 400 mm and MTB DT core diameter is 464 mm.

All drum dimensions are informative values.

Drum width is measured near center in place of axis. The periphery width can be higher up to 10% because of pressure winded microducts.

Drum	Flange diameter (mm)	Drum width (mm)	Shaft hole diameter (mm)	Winding maximum length (m)	Informative weight of full drum with chipboard flanges (kg)
MTB 2	600	616	65	<b>300</b>	32
MTB 3	900	624	85	<b>1 350</b>	115
MTB 7	1 000	534	81	<b>1 400</b>	123
MTB 9	1 000	444	81	<b>1 400</b>	122
MTB DT	1 200	386	81	<b>1 500</b>	130
MTB13	1 190	505	81	<b>2 100</b>	188